

ABSTRACT OF THE DISCLOSURE

[0079] A power up clear (PUC) signal is generated, based on a value of a supply voltage VCC. A first circuit element (such as an n-channel MOSFET MN0) of a first conductivity type having a first characteristic threshold voltage, and a second circuit element (such as p-channel MOSFET MP0) of a second conductivity type having a second characteristic threshold voltage, are provided in a PUC signal generating circuit. A first circuit portion (including MN0, R0) is configured to provide a first comparison input signal VIN-, and a second circuit portion (including MP0, R1, R2, and, switchably, R3) is configured to provide a second comparison input signal VIN+. A comparator COMP compares the first and second comparison input signals VIN-, VIN+, to cause the PUC signal to transition to an active state when one of the first and second comparison signals crosses another of the first and second comparison signals, in response to an increasing magnitude of the supply voltage during power up. The PUC signal generator automatically tracks (compensates for) device process variations and temperature changes, without reference to any externally supplied reference voltages or currents or bias voltages or currents.